

PATENT ABSTRACTS OF JAPAN

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(71)Applicant : YAMAHA CORP

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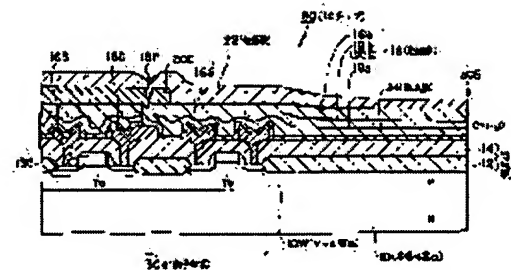
(72)Inventor : YAMAHA TAKAHISA

(54) SEMICONDUCTOR DEVICE

(57)Abstract:

PURPOSE: To prevent moisture from penetrating an element region from a chip end via an interlayer insulation film, in an integrated circuit (IC) chip.

CONSTITUTION: In an IC chip 30, under an interlayer insulation film 18 comprising a silicon oxide film 18a, a spin-on-glass (SOG) film 18b, and a silicon oxide film 18c, etc., a waterproof film 24 made of silicon nitride, etc., is so provided as to cover an element region 30a. By virtue of the waterproof film 24, moisture (H₂O) is so intercepted that it can not reach the element region 30a. Therefore, in the element region 30a, the inversion of the conduction type of the surface of a P-type well region 10W and the corrosions of wiring material layers 16S, 16D, and 16S', etc., can be prevented for the reliability of a semiconductor device to be improved. Still, the waterproof film 24 is not restricted to being provided just under the silicon oxide film 18a, but is restricted only to being provided in a lower layer than the SOG film 18b.



LEGAL STATUS

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